

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017845**Date Inspected:** 01-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** LI Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD****Segment # 10CE ~ 11AE**

This QA performed a joint survey dimensional inspection of Offset & Root Gap on segment 10CE ~ 11AE. The inspection was performed along with Caltrans (CT) QA Mr.Manjunath Math. Measurements of the Deck Plate to Deck Plate, Side plate to Side plate and Edge plate to Edge plate Cross Beam and Bike Path Side from PP 95 to PP 96. Details of these locations can be found on CT / QA document titled "OBG DCP Hand Measurement Survey: Transverse Segment Splice Root Gap & Offset". This QA recorded the measurements and submitted the information to CT / QA lead inspector for review.

**Segment # 10AW ~ 10CW**

This Quality Assurance (QA) received ZPMC inspection notification sheet 00502 to perform final tension verification for Lower Chevron (X3D) at Cross Beam and Counter Weight side between Panel Points (PP) 86 to PP 94 for Segment 10AW to 10CW. Inspected 10% on a random basis and found the tension to be in general compliance.

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Bolt sizes used were M22 x 65 DHGM220105 and final torque required was 690 N-m.

Bolt sizes used were M22 x 75 DHGM220034 and final torque required was 453 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666. See the attached Photo.

### Segment # 11AW ~ 11BW

This QA inspector observed, ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW11B-002; ZPMC CWI is identified as Mr. Zhu Zhong Hai. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. See the attached Photo.

### Segment # 11AW ~ 11BW

This QA inspector observed, ZPMC qualified welding personnel identified as 069683 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE11B-003; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

### Segment # 11AE

This QA inspector observed, ZPMC qualified welding personnel identified as 067752 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA082-002; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-TC-U4b-FCM-1.

### Segment # 11AE ~ 11BE

This QA inspector observed, ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE11-001; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhune,Manoj

Quality Assurance Inspector

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**Reviewed By:** Patterson,Rodney

QA Reviewer